Contents to volume 260

Discussion Letter

Electrostatic coupling between membrane proteins (FEB 08008) *G.C. Brown* 1

Research Letters

PAPS-reductase of *Escherichia coli*: Correlating the N-terminal amino acid sequence with the DNA of gene *cys* H (FEB 07983) *F.A. Krone, G. Westphal, H.E. Meyer, J.D. Schwenn* 6

The effect of quercetin on cell cycle progression and growth of human gastric cancer cells (FEB 07984) *M. Yoshida, T. Sakai, N. Hosokawa, N. Marui, K. Matsumoto, A. Fujioka, H. Nishino, A. Aoike* 10

Agonist-sensitive binding of a photoreactive GTP analog to a G-protein α-subunit in membranes of HL-60 cells (FEB 07995) *S. Offermans, R. Schäfer, B. Hoffmann, E. Bombien, K. Spicher, K. -D. Hinsch, G. Schultz, W. Rosenthal* 14

The protonated form of 1-N^6-etheno-[erythro-9-(2-hydroxy-3-nonyl)] adenine is identified at the active site of adenosine deaminase (FEB 07992) *V.R. Caiolfa, D. Gill, A.H. Parola* 19

Extensive precursor-product relationship between gangliosides formed from exogenous glucosylceramide in rat liver (FEB 07993) *M. Trinchera, C. Vallenzasca, R. Ghidoni, G. Tettamanti* 23

Photolabile μ-conotoxins with a chromogenic phenyldiazirine. A novel probe for muscle-type sodium channels (FEB 07994) *Y. Hatanaka, E. Yoshida, H. Nakayama, T. Abe, M. Satake, Y. Kanaoka* 27

The transmembrane topology of the α subunit from the ATPase in *Escherichia coli* analyzed by PhoA protein fusions (FEB 08003) *C. Bjørbæk, V. Foërsom, O. Michelsen* 31

High molecular weight forms of basic fibroblast growth factor recognized by a new anti-bFGF antibody (FEB 07996) *C. Grothe, K. Zachmann, K. Unsicker, R. Westermann* 35

Feedback regulation of ornithine decarboxylase expression: Studies using a polysomal run-off system (FEB 07997) *R. Autelli, I. Holm, O. Heby, L. Persson* 39

Stimulation of protein synthesis by raised extracellular pH in cardiac myocytes and perfused hearts (FEB 08002) *C.J. Gaitanaki, P.H. Sugden, S.J. Fuller* 42

Rapid proton release during flash-induced oxidation of cytochrome *c* oxidase (FEB 08004) *T. Nilsson, S. Hallén, M. Oliveberg* 45

Identification of multiple *ral* gene products in human platelets that account for some but not all of the platelet G_n-proteins (FEB 08006) *R.P. Bhullar, P. Chardin, R.J. Haslam* 48

Heterogeneity of protein kinase C expression and regulation in T lymphocytes (FEB 08005) *S. Lucas, R. Marais, J.D. Graves, D. Alexander, P. Parker, D.A. Cantrell* 53

Kinetoplast DNA-aggregating proteins from the parasitic protozoan *Crithidia fasciculata* (FEB 08007) *I. Tittawella* 57

Substrate isomerization inhibits ribulosebisphospate carboxylase-oxygenase during catalysis (FEB 08009) *D.L. Edmondson, H.J. Kane, T.J. Andrews* 62

RNA-binding protein-related sequence in a malaria antigen, clustered-asparagine-rich protein (FEB 07938) *K. Kuma, N. Iwabe, Y. Kawanishi, T. Miyata* 67

Inositol trisphosphate-mediated Ca^{2+} release in beet microsomes is inhibited by heparin (FEB 08010) *J.M. Brosnan, D. Sanders* 70

Y_1 receptors for neuropeptide Y are coupled to mobilization of intracellular calcium and inhibition of adenylate cyclase (FEB 08011) *L. Aakerlund, U. Gether, J. Fuhlendorff, T.W. Schwartz, O. Thastrup* 73

Calcium-dependent phospholipid binding proteins associated with the membranes of rabbit skeletal muscle (FEB 08013) *V.I. Melgunov, N.A. Mamedova, E.I. Akimova, T.A. Adzhimolaev* 79

The calcium ATPase of sarcoplasmic reticulum is inhibited by one Ca^{2+} ion (FEB 08014) *D. Khananshvili, J. Myung, R. Kolouch, W.P. Jencks* 83

Finnish hereditary amyloidosis: Amino acid sequence homology between the amyloid fibril protein and human plasma gelsoline (FEB 08021) *C.P.J. Maury, K. Alli, M. Baumann* 85

Potassium chemotaxis in *Rhodobacter sphaeroides* (FEB 08015) *P.S. Poole, S. Brown, J.P. Armitage* 88

Mastoparan inhibits phosphoinositide hydrolysis via pertussis toxin-intensive G-protein in human astrocytoma cells (FEB 08016) *N. Nakahata, M.T. Abe, I. Matsuoka, H. Nakanishi* 91

Carbamylcholine inhibits β-adrenergic receptor-coupled G_s protein function proximal to adenylate cyclase (FEB 08017) *S. Avissar, G. Schreiber* 95

Brain natriuretic peptide is cosecreted with atrial natriuretic peptide from porcine cardiocytes (FEB 08020) *T. Iida, Y. Hirata, N. Takemura, K. Togashi, S. Nakagawa, F. Marumo* 98

Ascorbic acid accumulation in plated human neutrophils (FEB 08018) *P. Washko, D. Rotrosen, M. Levine* 101

Quinine blocks the high conductance, calcium-activated potassium channel in rat pancreatic β-cells (FEB 08019) *E. Mancilla, E. Rojas* 105

A biomimetic model for vanadium-containing bromoperoxidase (FEB 08022) *H. Sakurai, K. Tsuchiya* 109

Asp_{83}, Glu_{113} and Glu_{134} are not specifically involved in Schiff base protonation or wavelength regulation in bovine rhodopsin (FEB 08025) *J.J.M. Janssen, G.L.J. De Caluwé, W.J. De Grip* 113

Urea cycle disorder in C3H-H-2° mice with juvenile steatosis of viscera (FEB 08023) *Y. Imamura, T. Saheki, H. Arakawa, T. Noda, T. Koizumi, H. Nikaido, J. Hayakawa* 119

Isolation and amino acid sequence of a novel 6.8-kDa mitochondrial proteolipid from beef heart: Use of FAB-MS for molecular mass determination (FEB 08026) *E. Terzi, P. Boyot, A. Van Dorsselaer, B. Luu, E. Trifilieff* 122

Structure of the gene encoding concanavalin A from *Canavalia gladiata* and its expression in *Escherichia coli* cells (FEB 08027) *D. Yamauchi, T. Minamikawa* 127

Identification of a putative amyloid A4-generating enzyme as a prolyl endopeptidase (FEB 08029) *S. Ishiura, T. Tsukahara, T. Tabira, T. Shimizu, K. Arahata, H. Sugita* 131

The *psb*C start codon in *Synechocystis* sp. PCC 6803 (FEB 08030) *S.D. Carpenter, J. Charite, B. Eggers, W.F.J. Vermaas* 135

Chlorophyll *a* and β-carotene content in the D_1/D_2/cytochrome *b*-559 reaction center complex from spinach (FEB 08031) *M. Kobayashi, H. Maeda, T. Watanabe, H. Nakane, K. Satoh* 138

Activation of pro-urokinase by the human T cell-associated serine proteinase HuTSP-1 (FEB 08032) *G. Brunner, M.M. Simon, M.D. Kramer* 141

Dermal glands of *Xenopus laevis* contain a polypeptide with a highly repetitive amino acid sequence (FEB 08034) *M. Gmachl, H. Berger, J. Thalhammer, G. Kreil* 145

Inactivation of cGMP-dependent conductance of rod outer segment plasma membrane induced bij cGMP (FEB 08035) *A.B. Zhainazarov, S.S. Kolesnikov* 149

Published by Elsevier Science Publishers B.V. (Biomedical Division)
00145793/90/$3.50 © 1990 Federation of European Biochemical Societies

Erratum 152

Notes to Authors 153

FEBS News 155

Meeting Report

Growth factors: their nature and role in medicine: Berlin-Buch (GDR), September 24–28, 1989 (FEB 08024) *F.-D. Boehmer, R. Grosse* 157

Research Letters

Saturation transfer EPR measurements of the rotational motion of a strongly immobilized ouabain spin label on renal Na^+,K^+-ATPase (FEB 07961) *J.E. Mahaney, J.P. Girard, C.M. Grisham* 160

Chloroplast transit peptides from the green alga *Chlamydomonas reinhardtii* share features with both mitochondrial and higher plant chloroplast presequences (FEB 08028) *L.-G. Franzén, J.-D. Rochaix, G. von Heijne* 165

Interactions between nitrogen oxide-containing compounds and peripheral benzodiazepine receptors (FEB 08037) *B.A. Weissman, G.T. Bolger, Bolger,, P.K. Chiang* 169

Prochymosin activation by non-aspartic proteinases (FEB 08012) *V.M. Stepanov, G.I. Lavrenova, E.Yu. Terent'eva, O.M. Khodova* 173

Thrombopoietic activity of human interleukin-6 (FEB 08038) *T. Nagasawa, T. Orita, J. Matsushita, M. Tsuchiya, T. Neichi, I. Imazeki, N. Imai, N. Ochi, H. Kanma, T. Abe* 176

Mastoparan, a peptide toxin from wasp venom, stimulates glycogenolysis mediated by an increase of the cytosolic free Ca^{2+} concentration but not by an increase of cAMP in rat hepatocytes (FEB 08040) *M. Tohkin, T. Yagami, T. Matsubara* 179

Hypomorphic *C4B15* variant of the fourth component of complement (FEB 08042) *M.J. Christenson, T. LaRosa, M. Jung, W.B. Bias, R.H. McLean* 183

Video enhanced imaging of the fluorescent Na^+ probe SBFI indicates that colonic crypts absorb fluid by generating a hypertonic interstitial fluid (FEB 08036) *R.J. Naftalin, K.C. Pedley* 187

Selective cleavage of glycyl bonds by papaya proteinase IV (FEB 08041) *D.J. Buttle, A. Ritonja, L.H. Pearl, V. Turk, A.J. Barrett* 195

Inhibition of epidermal growth factor-induced DNA synthesis by tyrosine kinase inhibitors (FEB 08043) *K. Umezawa, T. Hori, H. Tajima, M. Imoto, K. Isshiki, T. Takeuchi* 198

Is the pseudo-dyad in retroviral proteinase monomers structural or evolutionary? (FEB 08044) *J.K.M. Rao, A. Wlodawer* 201

Phosphorus-containing inhibitors of aspartate transcarbamoylase from *Escherichia coli* (FEB 08046) *N. Laing, W.W. -C. Chan, D.W. Hutchinson, B. Öberg* 206

Antithrombin activity of the hirudin N-terminal core domain residues 1–43 (FEB 08045) *J.-Y. Chang, J.-M. Schlaeppi, S.R. Stone* 209

Identification of an interleukin-1 beta binding protein in human plasma (FEB 08047) *J.A. Eastgate, J.A. Symons, G.W. Duff* 213

Detection of the monocarboxylate transporter from pea mitochondria by means of a specific monoclonal antibody (FEB 08052) *J. Vivekananda, D.J. Oliver* 217

Alterations of lipid composition in Friend leukemia cell tumors in mice treated with tumor necrosis factor-α (FEB 08053) *E. Bravo, G. Carpinelli, E. Proietti, F. Belardelli, A. Cantafora, F. Podo* 220

Pro→Ala-35 *Rhodobacter capsulatus* cytochrome c_2 shows dynamic not structural differences: A ^1H and ^{15}N NMR study (FEB 08058) *P.R. Gooley, N.E. MacKenzie* 225

Is a four-state model sufficient to describe actomyosin ATPase? (FEB 08059) *C. Tesi, T. Barman, F. Travers* 229

Ultracentrifugal analysis of the quaternary structure of the *raf* repressor from *Escherichia coli* (FEB 08057) *R. Jaenicke, I. Muiznieks, C. Aslanidis, R. Schmitt* 233

Specific interaction of the new fluorescent dye 10-*N*-nonyl acridine orange with inner mitochondrial membrane: A lipid-mediated inhibition of oxidative phosphorylation (FEB 08060) *A. Maftah, J.M. Petit, R. Julien* 236

Amino acid sequence of photosystem I subunit IV from the cyanobacterium *Synechocystis* PCC 6803 (FEB 08065) *F. Rousseau, B. Lagoutte* 241

A proportion of photosystem II core complexes are decoupled from the phycobilisome in light-state 2 in the cyanobacterium *Synechococcus* 6301 (FEB 08068) *C.W. Mullineaux, A.R. Holzwarth* 245

Solution conformation of leiurotoxin I (scyllatoxin) by ^1H nuclear magnetic resonance: Resonance assignment and secondary structure (FEB 08073) *J.C. Martins, W. Zhang, A. Tartar, M. Lazdunski, F.A.M. Borremans* 249

Enzymatic synthesis of nucleoside 5'-mono and -triphosphates (FEB 08076) *A.I. Zinchenko, V.N. Barai, L.M. Zalashko, N.E. Poopeiko, T.I. Pricota, G.G. Sivets, I.A. Mikhailopulo* 254

Study of ATP binding in the active site of Na^+,K^+-ATPase as probed by ultraviolet resonance Raman spectroscopy (FEB 08071) *R.G. Efremov, A.V. Feofanov, K.N. Dzhandzhugazyan, N.N. Modyanov, I.R. Nabiev* 257

Functional expression and sites of gene transcription of a novel α subunit of the $GABA_A$ receptor in rat brain (FEB 08077) *P. Malherbe, E. Sigel, R. Baur, E. Persohn, J.G. Richards, H. Möhler* 261

Tropomyosin-troponin complex stabilizes the pointed ends of actin filaments against polymerization and depolymerization (FEB 08063) *C. Weigt, B. Schoepper, A. Wegner* 266

Structure–activity relationship in vasoconstrictor effects of sarafotoxins and endothelin-1 (FEB 08062) *K. Kitazumi, T. Shiba, K. Nishiki, Y. Furukawa, C. Takasaki, K. Tasaka* 269

Correlation between the DNA supercoiling and the initiation of transcription by *Escherichia coli* RNA polymerase in vitro: role of the sequences upstream of the promoter region (FEB 08066) *R.K. Mishra, V. Gopal, D. Chatterji* 273

Metallothionein genes from the flowering plant *Mimulus guttatus* (FEB 08067) *J.R. de Miranda, M.A. Thomas, D.A. Thurman, A.B. Tomsett* 277

Expression of protein kinase C I in NIH 3T3 cells increases its growth response to specific activators (FEB 08069) *A. Cuadrado, C.J. Molloy, M. Pech* 281

Cyclic changes in translation of the mitochondrial isoenzyme account for the rhythm of aspartate aminotransferase activity in *Leptosphaeria michotii* (FEB 08072) *M. Romestant, S. Jerebzoff-Quintin, S. Jerebzoff* 285

The cosubstrate NADP(H) protects lysine 601 in the porcine NADPH-cytochrome P-450 reductase against pyridoxylation (FEB 08074) *K. Müller, D. Linder, L. Lumper* 289

Electron microscopic demonstration of a common structural motif in human complement factor C3 and rat α_1-inhibitor 3 (murinoglobulin) (FEB 08070) *A. Ikai, M. Nishigai, A. Saito, H. Sinohara, Y. Muto, Y. Arata* 291

ESR signals of NADH and NADPH under illumination (FEB 08078) *A.V. Umrikhina, A.N. Luganskaya, A.A. Krasnovsky* 294

Mapping of the immunodominant regions of the NAD-dependent formate dehydrogenase (FEB 08079) *A.V. Bogdanova, T.V. Cherednikova, T.A. Egorov, E.G. Harutyunyan, N.A. Kurochkina, V.S. Lamzin, A.P. Savitskiy, I.A. Shumilin, V.O. Popov* 297

Molecular cloning of two distinct vasotocin precursor cDNAs from chum salmon (*Oncorhynchus keta*) suggests an ancient gene duplication (FEB 08050) *J. Heierhorst, S. Mahlmann, S.D. Morley, I.R. Coe, N.M. Sherwood, D. Richter* 301

Sequence analysis of the promoter region of the rat vasopressin gene (FEB 08051) *E. Mohr, D. Richter* 305

Heme maintains catalytically active structure of cytochrome P-450 (FEB 08055) *V.Yu. Uvarov, V.E. Tretiakov, A.I. Archakov* 309

The γ subunit of brain G-proteins is methyl esterified at a C-terminal cysteine (FEB 08039) *B.K. -K. Fung, H.K. Yamane, I.M. Ota, S. Clarke* 313

Comment: Mitochondria and carcinogenesis (FEB 08064) *E. Quagliariello, S. Papa, C. Saccone* 318

Author Index 319

Contents to volume 323

Notes to Authors 326

FEBS News 328

Announcements 300